

Amendments to the Specification

Please replace the first full paragraph on page 3, line 5, with the following rewritten paragraph:

A PCI device must include an Initialization Device Select (“IDSEL”) (~~“IDEL”~~)—input signal. The IDSEL input is used as a chip select during configuration read and write transactions. Thus, when the CPU reads configuration information from a PCI device or writes configuration to a PCI device, the IDSEL input of the target PCI device must be asserted. Each PCI device provides an IDSEL input signal that is independently asserted by, for example, a host bridge device. Accordingly, the host bridge provides separate signals to the IDSEL input pins of the various PCI devices.

Please replace the second full paragraph on page 10, line 17, with the following rewritten paragraph:

The PCI Local Bus Specification limits the number of PCI devices that can be connected to a PCI bus to 17. That is, it is only permitted to have 17 PCI devices connected to a PCI busdevice. The number of AD lines, however, that are available for use as inputs to the PCI devices’ IDSEL pins is 21 (AD[31::11]). Thus, there will always be at least one, and generally 4, AD lines that are unused to connect to IDSEL pins. Of course, it should be recognized that all of the AD lines generally are used to represent addresses and data during read and write cycles and the data portion of configuration cycles. PLD 150 generally directs switch unit 154 to switch an unused AD line (e.g., AD16) to the common AD line, AD11, when a configuration cycle is run to the unused AD line (AD16).

Please replace the Abstract with the following rewritten Abstract:

A computer system with dynamic device identification redirection. The computer system may include a processor, a system memory, and a bridge logic device having a peripheral bus interface. The bridge logic device is associated with at least a first address line, which is also associated with a first peripheral device. The computer system may also include a logic device coupled to the peripheral bus that swaps a second address line for the first address line when a peripheral bus cycle is run to the first address line. A computer system reroutes a

configuration cycle intended for an unused system bus address line to the IDSEL, or equivalent, configuration chip select input pin of a device which uses the same system bus address line as another device on the system bus. The computer system has a PCI bus to which a programmable logic device and an electronically controlled switch are connected. The programmable logic device detects PCI bus configuration cycles associated with a PCI bus AD line that is otherwise unused as a chip select during configuration cycles. When the logic device detects a configuration cycle associated with the unused AD line, the logic device asserts a control signal to the electronically controlled switch. The switch then connects the previously unused AD line to the AD line that is connected to the IDSEL input pin of the PCI device that experiences the conflict. The PCI device then effectively responds to the configuration read or write cycle as if its IDSEL input pin was hardwired to the switched AD line.